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(54) Title: METHOD FOR RECOVERY OF NONFERROUS, RARE AND PRECIOUS METALS FROM ROBUST MINERALS

(57) Abstract: The method is referred to hydrometallurgy process and it serves for recovery of nonferrous, rare and precious metals from robust (hard to process) minerals, which may contain natural carbon or other robust compounds. This invention is aimed at increasing the recovery of nonferrous, rare and precious metals from robust minerals with simultaneous reduction of processing costs. The objective is attained, as the method for recovery of nonferrous, rare and precious metals from robust minerals envisages the processing of robust carbon-containing minerals by oxygen-containing oxidant with subsequent extraction of precious metal compounds from liquid phase, moreover, the treatment of robust carbon-containing minerals by oxygen-containing oxidant is performed in the presence of reducing agents featuring donor-acceptor properties, which are manifested in the fact that at the first stage of chemical reactions the reducing agents give their electrons to oxygen-containing oxidant and, as a result, form a stronger oxidant than the initial one, in the from of short-lived radicals and intermediate oxidation products of donor-acceptor reducing agents, which are oxidants, as well.